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CYSTIC TUMORS OF THE JAW.

[Read to the Massachusetts Medical Society, at the Annual Meeting held in Boston in May, 1866, and communicated for the Boston Medical and Surgical Journal.]

By J. MASON WARREN, M.D.

THE appearance of these tumors is generally very formidable, and the practice, for the most part, when the whole substance of the bone is dilated into a mere sac, almost entirely deprived of osseous substance, has been, until very recently, to remove the portion of the jaw involved by the tumor. When the tumor has grown simply at the expense of the outer table of the bone, either of the upper or lower jaw, without involving its whole substance, it has been customary to explore the cyst and remove a portion of it, causing inflammation and obliteration of the cavity, as in the case of cysts occurring in soft parts. Dupuytren, in his collected articles on Diseases of the Bones, has attached more importance to this question than any other writer, and illustrates by cases the effect of exposing the tumor by external dissection, removing a portion of the sac, and, by applications, effecting its obliteration. Professor March, of Albany, has written a valuable paper on this subject, in the "Transactions of the New York State Medical Society." Professor Gross and others have suggested the idea that in large cysts, which involve the whole bone, and which formerly were known under the name of "spina ventosa," the treatment should be the same. In one of the cases cited by the former gentleman, the extirpation of the bone was finally found necessary after this plan had been tried.

As to the causes of these diseases, they are various. In the jaw, they probably arise, in most instances, from irritation at the roots of the teeth; in the long bones, the head of the tibia for instance, from blows.

In 1862, I published, in the Boston Medical and Surgical Journal, a case occurring in an elderly woman of a cyst which involved the ascending portion and condyles of the jaw, and which I removed; not thinking it safe, in a person of her age, when the disorganization of the jaw seemed to be so complete, to run the risk of an experimental mode of treatment. Since that time, I have had an oppor-

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tunity of trying the conservative plan of treatment in two instances, which I propose shortly to relate.

Notwithstanding the principle which has been suggested or hinted at, for the treatment of large cystic tumors of the jaw, none of the writers on the subject have presented cases—where complete destruction of the bone has taken place, leaving nothing but a delicate cyst—which have been successfully treated by the method referred to. Dupuytren, in his work on “Diseases of the Bones,” gives several cases treated without excision; some of them, however, unsuccessfully. M. Nélaton has also written upon the subject, referring for cases to the work of Dupuytren, and advising the puncture of the cyst and the stuffing of its cavity with lint. Mr. Erichsen says, “when the cysts are so large that they have destroyed the integrity of the bone, or when they are associated with a large quantity of fibrous tissue, so as to constitute true fibro-cystic tumors, excision of the diseased bone must be practised.” Mr. Stanley, in his “Treatise on the Diseases of the Bones,” describes perfectly the affection, but does not allude to any other operation than the “removal of the tumor and of the portion of the bone from which it has arisen.”

In the two following cases, the treatment consisted in the puncture of the sac within the mouth, evacuating its contents, and at the same time obliterating its cavity by crushing in its walls; and lastly, in keeping up, by injections, &c., a sufficient degree of irritation to favor the deposition of new bone. The comparative mildness of this mode of treatment, and the excellent character of the results, combine to award the preference for this operation over excision, or even the large external incision adopted by Dupuytren.

Cystic Tumor of the Lower Jaw.

CASE I.—A young woman, æt. 25, with light hair, blue eyes, and delicate skin, applied to me, in the spring of 1862, on account of a large tumor involving the whole right side of the jaw above its angle. The tumor was of a globular shape, extended back under the lobe of the ear, forwards so as to encroach upon the cavity of the mouth, and upwards so as to press upon and somewhat to overlap the zygoma. The external surface of the tumor was smooth and shining, slightly œdematous, and she suffered somewhat from its pressure upon the surrounding organs. It had commenced, some years before, by a swelling at the root of the wisdom tooth of the right side, and the inconvenience caused by its pressure had become so great as to lead her to take measures for its removal.

Upon consultation, it was decided that a portion of the jaw would probably require removal, the tumor having been first exposed by an incision made inside of the mouth, to verify its character.

The following operation was performed, under the influence of ether. An incision was made in the most prominent part of the tu-

mor in the mouth, upon which a large quantity of glairy fluid escaped. Upon passing the finger into the opening, it was found that the whole jaw, at this point, with the articulating and coronoid processes, was expanded into a mere shell, at some parts as thin as parchment, and destitute of osseous substance. It was without solid contents. Under these circumstances, and considering the good health and youth of the patient, it was determined to make the attempt to save the jaw. A portion was therefore removed from the sac, and with the fingers the sides of the cavity were made to collapse, so as to come in contact with each other. In order to excite still further irritation, a bit of cotton cloth was forced into the interior, and the end left projecting into the mouth. A moderate degree of irritation followed, and in a day or two the pledget was removed, suppuration having commenced in the sac. The aperture was dilated from time to time by the introduction either of the finger or of a bougie, and the sac injected with tincture of iodine. In two or three weeks she left the Hospital, with the tumor reduced to about half its original size. From that time until the present, she has occasionally visited me at my house, and by keeping the external opening free, and occasionally irritating the interior of the sac, a solid mass of bone has been deposited anew, and the jaw has resumed somewhat of its original shape. The sac is in the way of becoming entirely obliterated.

In November, 1863, I again saw the patient, who came to consult me, not about herself, but about a friend. All signs of the tumor were gone, and the jaw had regained almost its natural shape; but a small aperture still existed at the site of the former opening into the mouth, from which a glairy fluid was occasionally discharged. She was quite well, and all the functions of the jaw were perfectly performed.

Subsequently, she applied to me with a similar tumor, but of a much smaller size, which had appeared anterior to the site of the first one. It was treated in a similar manner, with a similar result.

CASE II.—May 23d, 1863, Dr. Bennett of Uxbridge, Mass., brought me as a patient, a gentleman 56 years of age, with a large tumor on the right side of the face and parotid region. He was of a pale and yellowish color, much emaciated, and his aspect at first struck me as that of a person suffering from malignant disease. He said that, five years before, while eating, he had the sensation of something giving way in the neighborhood of the ascending ramus of the lower jaw. Shortly after, a tumor appeared in that region, which had slowly increased to its present size. Before making an examination, it was not easy to say whether the tumor was connected with the parotid gland or with the jaw. From the first commencement of the tumor to the present time, mastication, and for a good part of the time, deglutition, had been much interfered with. The tumor had been

examined by many physicians of experience, and by most of them considered as a parotid tumor, and, as the patient inferred, although he was not directly told so, of a malignant character. It extended backwards into the parotid region, upwards upon the face, and inwards, so as to occupy the right half of the palate, and was covered with a highly irritable mucous membrane, somewhat œdematous, and similar to what we often see investing malignant tumors in the mouth which have made their way through from the neck. During an examination, the patient said there had been of late a slight discharge of fluid into the mouth, and on making a careful inspection, a minute aperture was detected, at the point where the last molar tooth had been removed.

On introducing a probe at this point, a jet of serum, mixed with flakes of lymph, was projected to a considerable distance. I immediately enlarged the opening with the knife, so that I could introduce the finger. This was a matter of some difficulty, however, as the patient's jaws had been for a long time nearly closed in consequence of the disease. The finger penetrated into a large sac extending far out of reach, and on investigation it soon became evident that the whole tumor was formed by the expansion of the jaw from the development within it of an immense cyst. On withdrawing the finger, a barrier of bone was felt extending across the jaw, and behind it, under the first molar tooth, another smaller sac was discovered.

I now decided to treat this case in a similar manner to the preceding one. An oblong piece of about an inch in length and half an inch in width was removed by scissors, from the wall of the cyst, and, with a finger of one hand in the mouth, and a finger of the other on the outside of the face, the sides of the cyst were broken down, giving way under the pressure like parchment, with a crepitating noise. The projection of the tumor on the face, as well as within the mouth, became in a great measure effaced. There was a slight but unimportant effusion of blood. The patient returned home under the charge of his physician, with the intention of pursuing pretty much the same course as was adopted in the former instance. On account of his age, and the debility caused by the want of proper nourishment, and owing to the difficulty of mastication, he was ordered tonics and a nutritious diet.

About four weeks later, I again saw him. Everything had gone on well. The tumor was not more than a fourth as large as formerly, and bone had begun to be deposited in the walls of the sac. His health was wonderfully improved, and his complexion had assumed a healthy hue.

Dec. 8th, 1863.—I saw him for the third time, so altered for the better as scarcely to be recognized as the same person. The jaw externally had resumed its natural shape, and, on examination with the finger, its distinctive anatomical marks and processes could be

felt. On the inside, where the incision had been made, a deep sulcus was observed, lined with mucous membrane, into which a probe could be passed into the ascending ramus. There was no discharge to be detected, and the power of mastication was as good as ever. The only trouble he experienced was from the lodgment of food in this cavity.

Three months later, he was seen with the jaw in a perfectly healthy condition, having all its functions, and the only change from the normal state was perhaps a somewhat more solid and thickened condition than natural, with a sulcus existing at the back part, where the tumor had originated.

In 1866, he made me a visit, for the purpose of showing the complete success of the operation.

Cystic Tumor of the Upper Jaw.

CASE III.—A young lady, æt. 16, of English parentage, was brought to me in May, 1865, on account of a tumor which had been developing for the last three years, in the alveolus of the right upper jaw, just above the canine and bicuspid teeth. Three years before, the nerve of the canine tooth had been destroyed by arsenic, and the carious cavity filled with gold, the first bicuspid also being filled at the same time. Irritation soon commenced at the roots of these teeth, and gradually, and almost imperceptibly, a swelling appeared there. A month before she came to me, this tumor opened at its most dependent part, discharging a glairy fluid, which continued to exude until I saw the case.

The aperture admitted a small probe, which penetrated into a deep, smooth cavity. With the finger, the tumor from below appeared firm; but, when pressed upon under the gum, a degree of elasticity was distinguished.

I informed the parents of the young lady that the disease was a cystic tumor of the bone, and advised an operation. This was assented to. The patient was etherized, and a cut made into the tumor. The mucous membrane was then dissected up from its surface, so as to expose so much of the bony sac as would admit of a free opening being made into it, and the portion of bone was removed with scissors. The finger could now be passed freely into the cavity, which was quite smooth and entirely lined with membrane; it was not penetrated by the roots of any of the adjacent teeth. The cavity was stuffed with lint, in order to excite inflammatory action, for the purpose of obliterating the sac.

The operation had all the effect that could have been desired. In the course of a couple of months, granulations filled up the cavity, entirely obliterating it. She was completely relieved of the disease.

One or two other cases of cysts in the upper jaw I have treated in the same way, with a similar result.

A CASE OF LEUCODERMA.

[Read before the Boston Society for Medical Observation, June 4th, 1866, and communicated for the Boston Medical and Surgical Journal.]

By HALL CURTIS, M.D., of Boston.

PATIENT is a short, wiry Irish groom, with a sallow, emaciated, almost cancerous look; he says he has always had very good health until three weeks ago (he came to me March 4th), when he noticed a small lump in the left groin, which gradually enlarged; not generally painful, though at times there was a sharp sting in it. He also states that he has felt quite chilly at times in the evening, though sitting close to the stove; at night, he is so cold that he heaps coverings on his bed. Awaking, he finds himself sweating profusely—steam rolling up from his arm as he protrudes it from the bedclothes. Three months before this time, he was troubled with occasional dizziness, and would often have fallen if he had not clung to some support.

When I examined him, I found in the left groin an irregular mass lying below Poupart's ligament, stretching obliquely along the line of groin; three inches in length by one and one fourth wide; not uniform, broken as it were into two folds by a furrow running lengthwise with the mass; not tender; hard, elastic, immovable; without fluctuation, impulse, or movement from coughing; not disappearing when on back, or by digital pressure. The skin covering the lower fold of a purplish color, as if pus was superficial. The mass could be nearly surrounded by the fingers.

The mass was certainly irreducible, and it apparently was not crural hernia—though this hernia is not always reducible, its sac being sometimes tied down to the surrounding parts, and changing in its new position to such an extent that it might readily be taken for an inflamed gland.

It was equally improbable that it was a psoas abscess, though the patient now complained of severe pain in his back; however, there were no abnormal features about spine, nor any tenderness at any point; the pain he complained of, situated apparently in the muscles lying on each side of column just below rim of pelvis, preventing his turning when in bed, but not at all troublesome when up, all movements being free. A psoas abscess, formed by pus flowing down from its source higher up, can be emptied by direct pressure; can, so to speak, be reduced.

It was not a bubo. The genitals were free from all suspicious ulcers, cicatrices or discharges. The patient had a gonorrhœa twelve months before. A peculiar discoloration of the penis was noticed, which will be mentioned again.

A varicose state of the femoral can also be reduced, and the hand placed on it can perceive a rustling when the patient coughs. Nothing of the kind was found, though the veins of each leg were in a well-developed varicose state, without ulceration.

It was judged to be caused neither by a cancerous growth nor by serofulous glands. The former very rarely attacks the groin primarily. The latter generally are found on each side.

The condition of the man—his loss of flesh, his debility, the stinging pain, the rigors and sweating, the gradual development, and the impure state of the blood shown by the unhealthy aspect of abrasions or where splinters had torn the tissues, might cause us to lean towards the conclusion of its being a cold abscess.

The patient remembered, at last, that he had worn, a short time before he noticed the swelling, a pair of tight boots, which pained him exceedingly, the pain running up to the knee and thigh; so it seems probable that the swelling was caused by the inguinal glands, prone to be excited by the varicose state of the veins, being irritated by the painful constriction of the tight boot, and a subacute inflammation like that of a cold abscess ensuing.

The mass was gradually diminishing, after poultices and strapping. He has never had any inconvenience from it. It has never interfered with his walking. He has been able to work all day till he came to me.

With this, the patient presents the following condition:—skin cool, but breaks readily into perspiration; tongue perfectly clean, moist and warm; pulse varying from 124 to 84; slight cough; no expectoration; pulmonary sounds normal; cardiac at times rapid, continuous, but no valvular abnormal sounds; no headache; no nausea; no vomiting. During treatment, his appetite became excellent; he slept well; had no sweating at night; no recurrence of chills; bowels apt to be constipated.

My attention was attracted to the peculiar state of the skin, and the following notes were taken of a case of *Leucoderma*.

Patient 40 years of age; his complexion dark brown; hair long, straight, of coal-black lustre, with grey hairs scattered singly, but not occurring in patches; eyes dark brown, with sclerotic coats somewhat congested and yellow; a collar of dark-brown skin encircled the neck, with a concave border, its lower edge broken up into irregular but deeply marked concavities, running just above the clavicles.

The arms, on their posterior aspect, were generally dark (as you would expect to find them in a man who works with his sleeves rolled up); still, here and there, round patches of whitened skin were seen in the midst of the dark integument. The anterior portion of each arm was markedly discolored, this white surface extending irregularly into the dark skin of posterior aspect. Nothing peculiar about hands, excepting a few unhealthy ulcers from splinters. The chest and back were of a dirty mottle, the latter retaining its color better than the chest. The whitened skin was most marked over the abdominal region, where it spread largely, breaking into the natural dark pigment-skin of the lateral portion of the body. The integument about the umbilicus preserved its natural color, though

looking of deeper hue than the surrounding whitened skin, and being more pronounced on the lateral and lower parts, yet broken up, and fading into white.

The white patches encroached upon the dark skin, which lay along the right side, stretching almost in a continuous surface from the right crest of ilium up to axilla, dotted here and there with islands of white of varying shape and size. The axillæ were white. On the left side, the whitened patches had spread much more; only a dark patch remained over left iliac crest, and a narrow stripe in left iliac region.

The whitened patches ended in an irregular convex border on each thigh at the upper fifth. The legs were dark brown, with the exception of the popliteal spaces where the white tints again appeared. The upper two-thirds of penis were white, the lower third of prepuce dark brown—the upper portion of scrotum white and covered with white hairs. The pubis mostly covered with dark hair. On the lower part of scrotum where the skin was dark, the white hair seemed to be nearly equal to the dark.

On the centre of the lower lip was a dark colored patch, the size of half a pea.

It seems to me this case would be classed by many with the bronzed skin or Addison's disease—many of its prominent features resemble it, and might lead to that conclusion. Thus Dr. Addison writes—"The leading characteristic features of the morbid state to which I wish to call attention are anæmia, general languor and debility, remarkable feebleness of the heart's action, irritation of the stomach, and a peculiar change of color in the skin occurring in connection with a diseased condition of the supra-renal capsules. Now in this case the irritation of stomach is the only point which differs. The patient has a good appetite, good digestion, no nausea, no vomiting."

Dr. Addison again says, the discoloration pervades the whole surface of body, but is commonly most strongly manifested on the face, neck, superior extremities, penis and scrotum, and in the flexures of the axillæ and around the naval. In this case the deep coloration is found strongly marked, if you will, on the neck, superior extremities, naval, penis and scrotum, but the flexures of the axillæ and the popliteæ are light.

The discoloration has a method of affecting the body by a uniform discoloration of the whole integument; of course most marked where there is the most pigment—thus the axillæ and pubis are prominently affected. The face and hands also being exposed to the sun, early show the change. "In some cases the discoloration occurs in patches, or perhaps certain parts are so much darker than others, as to impart to the surface a mottled or somewhat chequered appearance." Dr. Wilks, of Guy's Hospital Reports of 1862, does not deny that the color may occur in patches, but he thinks he is correct in saying that all experience has hitherto shown that the discolora-

tion has been uniform over the whole of the body. In fact, in many of the cases given to disprove Addison's disease, the pigmentation has occurred in patches, and in others there can be no doubt that jaundice, pityriasis, ephelis, and ichthyosis have been mistaken for the discoloration. Of the 25 cases given by Dr. Wilks, all were very dark except four, where discoloration was slight, and one where there was no discoloration.

Pain in back is found in several cases. In three cases the spine was diseased and psoas abscess formed. In most cases the pain was situated in the gastric region, passing from the epigastrium through to the shoulders.

In the monograph of Dr. Addison it is stated, that symptoms may be observed in the course of the disease which denote disturbed cerebral circulation. Dr. Wilks more strictly considers the nervous centres to be impaired, and that the various symptoms result therefrom. Thus in these cases reported by him—delirium and convulsions occurred in 2—numbness of fingers in 2—one of them accompanied by neuralgic pains in limbs and delirium. In this case there were sudden attacks of dizziness with tendency to fall. In one case reported in the Medical Times, Jan. 24, 1857, by Dr. Barlow, loss of consciousness, and what are termed "fainting fits," were the earliest symptoms noticed.

Dr. Hutchinson, in London Hospital Reports for 1864, sums up the matter in the following words: "In morbus Addisonii we have a diffused darkening of the skin, with spanæmia, and greatly enfeebled health. The skin becomes darkest on the parts naturally supplied most liberally with pigment, on those exposed to the sun and air, or to accidental irritants (blisters, &c.); a disagreeable negro-like odor often attends the patient. No where except on mucous surfaces are there any abruptly margined patches."

In pityriasis versicolor, we have dark brown patches with well defined spreading borders on normally tinted skin. The disease is rare in the aged, and never occurs in children. The patches rarely occur in other places than the chest, back, abdomen, shoulders and upper extremities. A cryptogam can be readily demonstrated by the microscope.

In leucoderma, we have perfectly white, well defined patches, with spreading edges on a brown skin. The disease may affect any part, and is common on the forearms and hands. It may occur at any age. There is no cryptogam.

Dr. Watson has apparently confounded the two diseases, for in his description of "bronzed skin," he says, "sometimes the discoloration is deeper here and there, and gives a mottled appearance to the surface, and sometimes it is diversified with white patches in which the skin is blanched, is more white and colorless than healthy skin, like the nails and conjunctivæ, and the hair on the head, and on the pubes, corresponding to those spots, becomes perfectly white.

As Dr. Hutchinson writes, "Leucoderma commences in white points—these enlarge into small round patches—these increase, coalesce, and thus form irregularly shaped patches, but yet pursuing the convex border. Sometimes small islets of brown may be left on large areas of white." In our case at first sight the dark patches seemed much more apparent than the white, as if they constituted the abnormal state, but on closer examination they (the dark portions) constantly showed the concave border, and very markedly so; they were smooth, they were not raised above the skin, there were no loose scales of epidermis, nor any cryptogams, nor was there any itching. The white patches, whether as dots, as small separate patches, or largely spreading tracts, always presented the convex border, breaking into the natural dark skin, which splitting up before them seemed to melt away at their approach.

The patient said he had noticed these discolored spots first when a boy, some 30 years ago, when bathing in Ireland with his brother. Their attention was attracted by the white appearance of the thighs and side of chest.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY CHARLES D. HOMANS, M.D., SECRETARY.

APRIL 23d.—*Cancer of the upper part of the Oesophagus, involving the Larynx, and opening externally.*—Dr. JACKSON showed the specimen, which Dr. Henry Cowles, of Saxonville, had brought to him this morning, and which was removed yesterday. The patient was a tall, thin, dark-complexioned, healthy woman, and knew of no case of cancer in her family. Age, 70 years. Rather more than a year ago, she began to have soreness of the throat, with dysphagia, and this went on increasing until death, so that from the time when Dr. C. first saw her, nine weeks ago, she could take no solid food. There was then a firm swelling, in the form of a ring, over the upper part of the larynx, and along the left side of the neck, extending somewhat to the right side, discolored, and looking like an abscess that would soon break. In a few days it opened like a carbuncle, by three or four small apertures, and discharged a considerable quantity of thin pus. About two weeks afterwards, a probe was passed in towards the left side, and over two inches; and Dr. C., suspecting a communication with the diseased surface, gave the patient a little indigo-water, which soon appeared externally and verified his diagnosis. Towards the last, about one third of all the liquid she took was discharged externally, but none seemed to pass into the trachea, so as to cause choking, until the last few days. The pain and soreness was very great, extending into the left side of the neck and ear. Much mucus hawked from the throat, and during the last two days some blood. From early in her sickness she was hoarse, and occasionally quite so, but never aphonic. No dyspnoea until the last three weeks, but afterwards in paroxysms

that would last for an hour, were increasing in frequency, and sometimes very severe. Under this disease she became very much emaciated and sallow, and kept her bed more or less the last three months, but retaining her appetite, though unable to swallow food.

The specimen shows an open and sufficiently defined ulceration of the œsophagus, commencing about an inch below the glottis, extending downwards two and a half inches, and involving nearly the whole circumference of the canal. At the lower extremity of the diseased portion, the morbid deposit appears in the form of a milky-white, soft, grumous or half liquefied mass of considerable size; and between the œsophagus and larynx, upon the left side, all the tissues seem to be indefinitely infiltrated with the same. The inner surface of the larynx, upon the left side and posteriorly, is extensively reddened, irregularly raised by this same deposit, and to a very small extent it appears to be ulcerated; there being a small opening through into the diseased portion of the œsophagus. The vocal cords seem but little affected. The thyroid cartilage was denuded to some extent; and, being ossified, it had become necrosed.

Dr. C. did not examine the other organs, as there was no evidence of their being diseased.

MAY 14th.—*Comparison of the Right and Left Clavicle.*—Dr. J. WYMAN alluded to the want of symmetry in the clavicles of the two sides of the body, and presented the following table as the result of the comparison of several pairs:—

PAIRS OF CLAVICLES.	LENGTH.		WEIGHT.	
	Right.	Left.	Right.	Left.
I.	5.35	5.70	20.150	23.100
II.	5.64	5.64	27.720	20.350
III.	5.55	5.50	24.150	22.540
IV.	5.40	5.57	10.410	10.240
V.	5.55	5.73	17.320	17.290
VI.	5.45	5.73	29.750	30.700
VII.	6.27	6.40	19.800	20.800
VIII.	5.94	5.94	27.200	24.850
IX.	5.86	5.86		

Length in inches and one hundredths. Weight in grammes.

Maximum length, 6.40 inches. Maximum weight, 30.700.

Minimum " 5.35 " Minimum " 10.240.

Right clavicle longest in 1 pair; left in 5; clavicles equal in 3.

Right " heaviest in 5 pairs; left in 3.

MAY 14th.—*Extensive Cancer of the Rectum.*—The specimen was received from Dr. George G. Tucker, of Westfield, who furnished the following history of the case:—

The patient was a farmer, 68 years of age, of industrious and temperate habits, most powerfully built, and belonging to a family that is remarkable for size, weight and constitutional vigor—no one of the number having ever suffered from cancerous disease. He has been treated for piles by various physicians and quacks for about a year, when, about ten months before death, he came under Dr. T.'s care. The sensation in the rectum he described as of weight, fulness or distension, and there was frequently a slight discharge of mucus or blood, but without much actual pain until about a month before death, when both the pain and the discharges were considerably increased,

with an almost total loss of control of the sphincter. The discharges had been constantly offensive, and towards the last were more so. Tenesmus was frequent, but never very distressing. Throughout the disease, the bowels acted pretty regularly, but always with pain; this last being severe during the last week, but it was apparently rather from tympanitic distension than from the disease itself, and was readily relieved by small doses of opium and conium. The appetite, which was always sufficient, was sometimes craving, and his food seemed to be well digested. He gave up work about a year before his death, but frequently rode short distances without pain or inconvenience, though walking caused an aching pain so long as he was under Dr. T.'s care; during the last three months he kept his bed. The pallid, straw-colored complexion of cancer was well marked; but the emaciation was less marked than would have been expected. Until the last two or three weeks there was no dropsical effusion, and then only in the right foot and leg, and to a slight degree.

The disease commences about two inches from the verge of the anus, and extends upwards four inches. The whole circumference of the intestine is involved, the limits of the disease are perfectly defined, and the general appearance shows unequivocally its malignant character, though there is nowhere any encephaloid, scirrhous or colloid deposit to be seen. No trace of the original tissue of the intestine could be distinguished upon the cut surface, but the whole had a soft, opaque, thickened, and perfectly disorganized look; the structure was loose or coarse, and infiltrated with fluid, with many quite small, superficial sloughs upon the surface. In one place the diseased structure was destroyed to the extent nearly of an inch, and at the bottom of the cavity was a large slough. The intestine immediately above the seat of the disease is healthy, excepting a number of quite small and superficial ulcerations; there being very little if any thickening or dilatation. Dr. T. found the diseased portion of the intestine so adherent to the sacrum that it was removed with some difficulty. The other organs he found healthy.

"The microscopic examination of a portion of the diseased rectum," by Dr. ELLIS, "showed that it was of a malignant character. The elements, it is true, did not resemble those usually figured in connection with cancer, but they were unlike any of the tissues of the body and were characteristic of none of the various morbid growths. It was rather their want of character than anything specific, which revealed their true nature. The cells were of every conceivable shape, none of them very large, and none with clearly defined nuclei or nucleoli. They resembled very closely such as I have seen in malignant disease of the stomach and uterus."

Dr. JACKSON remarked upon the correspondence between the microscopic and the gross appearances. There was nothing definite to the naked eye—none of the usual appearances of cancer any more than of the natural tissues of the body; and yet no one probably, who was accustomed to the examination of such cases, would hesitate to pronounce it cancer. This correspondence, he believes, is not unfrequently observed; and one who expects to find positive and definite microscopic appearances in every case of cancer will find himself very much mistaken. The opposite view in former years tended much to the discredit of microscopy.

Dr. J. showed a cast in plaster of the intestine that had been taken for the Cabinet of the Massachusetts Medical College, and colored after nature.

MAY 14th.—*Treatment of Erysipelas.*—Dr. COTTING read a paper entitled "Erysipelas; two cases illustrating its Natural History" (see this JOURNAL, Vol. LXIV., No. 19). The patients were successfully treated with little if any medicine, only enough being done to render them comfortable.

Dr. JACKSON asked the opinion of surgeons who had been in the Army in regard to the treatment of this disease.

DRS. AINSWORTH and GREEN said it was generally considered as a constitutional affection, but military practice varied as much as civil.

Dr. ELLIS said he had lately treated an old lady with erysipelas of the face on the expectant plan, merely preventing suffering as far as possible; she had done perfectly well.

Dr. MINOR said that many cases seemed self-limited and would terminate well if let alone; but sometimes the disease tends to become chronic, and will be shortened by doses of quinine, often repeated.

Dr. J. BIGELOW said, "No one can tell at the beginning of a case of erysipelas what course the disease is going to take, nor can he tell what part of the body is to be next invaded, nor can he by any art arrest or prevent it from visiting any part; yet the disease in most cases like those now reported, stops after a certain time and at a certain limit, and the credit is apt to be given by illogical reasoners to whatever active treatment happened to be in use at the time." He considered that the most beneficent part of a physician's practice consisted in preventing patients from doing themselves harm. "There is a great difference between medicine and medication, between the science of medicine and the trade of medicine. The first, being founded in reason and truth, is most successful in the end. The second makes a common cause with quackery, and is apt to be outrun by it."

Dr. BOWDITCH believed that, in regard to erysipelas, all external applications merely gave relief, and he doubted about the influence of quinine internally, at least in the majority of instances of the disease; but he did object to the utter scepticism of the day in regard to all remedies. He believed that, while it was incumbent on us to avoid the wholesale drugging of former days, it was also important to remember that all past experience in the use of remedies is not to be ignored. There were certain remedies, such as opium for example, about which there was no scepticism, but a firm belief that it would relieve pain, and he had observed that even the most sceptical used that drug very freely, too freely at times. There was scarcely any one of the more important remedies handed down to us by the older writers that could not be, at times, beneficially used. Dr. Bowditch now rarely, if ever, used the lancet; but he could not believe that it was right to take the position held by some, that the lancet should be wholly thrown aside. He had used it some few years ago with apparently marked success in giving prompt relief to severe general symptoms, and with shortening, or at least a mitigation of the subsequent course of the complaint. The patient was a young, stout, full-blooded Irish girl, suddenly taken, three days previously, with severe orthopnoea, cutting pains in the region of the heart, consequent on acute rheumatism. She had high fever and great restlessness. When seen, she

was panting, and in the greatest distress. The pulse was small, very quick, very feeble and uneven. The sounds of the heart were very obscure, the impulse feebly felt, and dulness on percussion over the heart was greater than usual. It was the third day of the attack. Dr. B. doubted at first whether, according to modern scepticism, he should bleed. Having no doubt what the fathers would have done, and believing that the apparent weakness of the pulse was owing to the heart being too heavily filled with blood, and feeling sure that the loss of a few ounces of blood in such a patient could do no real harm, he opened a vein and bled to about twelve ounces, with the most satisfactory and immediate results. The pulse fell and became fuller and regular; the pain in the side disappeared, the dyspnoea was relieved, and although the disease was not *strangled*, it ran a mild, short course, and without a trace of the severer symptoms noticed before the venesection. Dr. B. could not but believe that the venesection had a most beneficial influence. He also stated the details of his treatment during the subsequent course of the disease.

Dr. BIGELOW appealed to Dr. Bowditch to say whether in the course of his practice he had not treated a dozen other cases with the same remedies, and without any benefit or arrestation of the disease. The case related appeared to him an exception, and not a general rule. Acute rheumatism in any part or organ is often relieved spontaneously, by metastasis, in half an hour. Dr. Bigelow was not sceptical, as seemed to be supposed, in regard to the usefulness of medicines in palliating this and other diseases. He was in the habit of giving medicine almost daily, and sometimes, though rarely, resorted to venesection in very acute diseases. It fails continually in rheumatism, as it does in apoplexy and paralysis. He had known hemiplegia to come on during venesection, after the patient had bled half a pint and more from the arm. The late John Quincy Adams was suddenly prostrated with hemiplegia. He refused to be bled, and was entirely recovered in three months.

Bibliographical Notices.

Cholera; Facts and Conclusions as to its Nature, Prevention and Treatment. By HENRY HARTSHORNE, A.M., M.D., Member of the American Philosophical Society; Professor of Hygiene in the Auxiliary Faculty of Medicine in the University of Pennsylvania, &c. 32mo. Pp. 70. Philadelphia: J. B. Lippincott & Co. 1866.

Asiatic Cholera. By F. A. BURRELL, M.D. "Glean and gather among the reapers." 24mo. Pp. 155. New York: William Wood & Co. 1866.

BOTH of these little volumes have been prepared by their authors, of course, as their contribution to the current medical literature, to meet the urgent demand which everywhere exists to learn all that can be learned of the dreaded epidemic, whose arrival on our shores has been so confidently looked for during the present season.

Dr. Hartshorne writes from his own experience with cholera in Philadelphia in 1849, 1850, and 1854, and in the latter year in Colum-

bia, Pa., also, and from an extended reading of the literature of the subject. Beginning with a definition of the name of the disease and a condensed account of the appearances after death, the author gives a concise history of cholera from the year 1629, the earliest date at which a distinct description of the disease was given, by Brontius, a Dutch physician at Batavia. Then follows his account of the disease itself, under which about half the space of the work is devoted to the question of causation—the question which of all others, in its bearing upon the question of prevention, occupies the medical mind of this country most at the present time. Like most others who arrived at fixed opinions during former epidemics, especially if they put these opinions in print, Dr. Hartshorne avows himself a sceptic as to the contagiousness of cholera, and even goes so far as to say that it “has never been shown to be contagious in a single instance” (p. 23), his definition of a contagious disease being that it is so “only when its cause is a material produced by a morbid process in the bodies of the sick, and generating the same disease in those whom it reaches, either by contact or at a distance through the air.” He brings forward a good many cases in support of his views, some of which have been shown to be as clear cases of disease propagated by contagion as possible; such, for instance, as the outbreak of cholera on board the New York. The recent instances of the disease on board the England and Virginia he also quotes in the same connection, cases which, in our opinion, are equally weak as arguments. The author admits that cholera is *infectious*, and so admits all, in our opinion, that is necessary to prove the importance of all sanitary precautions, quarantine included. The practical question is, is cholera communicable? If so, let it be kept, by every possible humane precaution, as far as possible from healthy communities. The author gives a synopsis of the various methods of treatment, but seems to rely most on small doses of stimulants and anodynes, with external warmth and rest. This work concludes with the following remarkable paragraph, which is almost identical with one in a recent article by one of our most respectable physicians, and which excited not a little mirthful comment in the community (to whom it was addressed through the columns of a newspaper) at the time. “Cholera is not, after all, a hard death to die. To me, it appears one of the easiest modes of exit from the world.” Perhaps it may be; but we must be excused for doubting whether the symptoms before the final exit, the incessant vomiting, the racking cramps, &c., make, in any sense, the path to that exit a smooth or an easy one. And then, again, the trouble is, that people *don't want to die*.

Dr. Burrall's work is much more to our taste, and, in our belief, much more in accordance with the strict truth than Dr. Hartshorne's. The author announces himself at once as a firm believer in the contagiousness of cholera. But a small portion of his work is given to the literature of the disease, except as it is directly connected with the history of its appearance at particular places or the special opinions of medical writers on the subject. The author gives an account of the various epidemics which have become matters of history, and then proceeds at once to the discussion of the question of contagion. We think he makes out his case. Our own views are pretty well known to our readers, so that we do not, perhaps, require any new

arguments to assure us that he occupies the right ground. We do not care to follow the author in detail through his work. His advice with regard to sanitary precautions, disinfectants and the like is judicious, and his views as to treatment accord with those of the wisest members of the profession. A good many facts are given in the Appendix and elsewhere relative to the present epidemic in Europe. As a whole, we commend it heartily as a wise, practical and very interesting book. It is very neatly printed.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, JULY 19, 1866.

ELECTION IN HARVARD UNIVERSITY.

THE present week will be marked by an event of great importance to the cause of education. The oldest and leading institution of learning in the country, for the first time, is at liberty to govern itself, free from the restraints of political and local prejudices. By the action of the Legislature Harvard University has been allowed to sever her connection with the State, and the first act of her independence will be the election of Overseers by the Alumni to fill the places of those of the old State board, whose term of office has expired. Thus in four years the entire government of the University will be in the hands of those who are chosen by a body supposed to be her best friends, and the best judges of her interests.

That reform has long been needed in the conduct of some parts of the college is known to all who have any interest in its management or in education, and the greatest care should be exercised in the selection of those who are to have the control of its affairs in future. There is great danger that the position may be given as a reward for material benefits received, or in anticipation of those hoped for, to those not fitted to hold it, and that money instead of merit shall come to be considered a qualification. There is another danger which must be carefully guarded against, or the popular and representative spirit of the election will be lost, and a new power be inaugurated, which will be a greater evil than the old weakness of political elections. It is the rule of a clique which will aim at the control of the University by the nomination of candidates selected to carry out its plans. Such a body may entirely defeat the unsuspecting efforts of the great mass of the Alumni who would see a more liberal spirit manifested in the management of this seat of learning.

There are matters of great importance relating to the fundamental principles of education which must inevitably be agitated, and the settlement of which will change in great measure the character of the College. They already and largely occupy the thoughts of some of the most experienced men of science in England and at home, and their views have been expressed in no uncertain terms. The words of Professor Huxley, so recently laid before our readers, "it is the duty of every man to lift up his voice against the scandalous perversion of human time and human ability under the system of gerund-grinding

which now prevails," and the important paper of Dr. Bennett on Medical Education, just published, are but the echo of the spirit of the admirable address of an older teacher of our art amongst us before the Institute of Technology. The undergraduate department must be made a preparatory school for the higher professional departments more fully than it has hitherto been. It can be made such, and still maintain its high character for belles-lettres by making the studies of its last two years almost entirely optional and fitted to the future work of each student. Its management should be more under the direction of those who best know the deficiencies of those who leave it for the more advanced courses of study, and who are obliged to waste so much of their time in the elementary instruction which should have been previously given. It should no longer be allowed to control appointments in other departments, nor should the Corporation be permitted to negative plans which have received the unanimous approval of any faculty and the whole profession it represents. Such an instance has recently occurred, which has materially interfered with the advancement of medical education in New England, and such narrow-minded tendencies should not be forgotten in the coming election. Men should be chosen from each profession to fill the position of Overseers, and we trust that the numerous Alumni among doctors of medicine will see that their interests are strongly and fully represented in future boards.

There is another matter of reform to which we hope the new government will turn its immediate attention; viz., the present condition of the committees for examination in the various branches of instruction and departments of the University. They are in many instances a disgrace to her. Men have been placed upon some of them who know nothing whatever of the subjects thus associated with their names, and whose appointment is an insult to the men of learning and science who properly occupy this important position.

Causes of the Position of the Fœtus.—Prof. von Scanzoni, of Würzburg, sums up a paper on the causes of the frequency of the head-presentation in the human fœtus, with the following conclusions. 1. The frequency of the cranial position of the embryo during pregnancy is not explained by Simpson's theory of reflex movements of the fœtus; nor, as alleged by Dubois, by its instinctive movements; nor by the hypothesis of Carus, according to which the fœtus lives a mere vegetable life within the uterus. 2. The position of the fœtus is dependent on the operation of various circumstances: viz., *a*, the force of gravitation; *b*, the form of the uterine cavity; *c*, the form of the fœtus; *d*, the quantity of amniotic fluid; *e*, the contractions of the uterus during pregnancy and the first stage of labor; and *f*, the active movements of the fœtus. 3. Up to the time when the placenta is developed, the embryo may assume any position, vertical or horizontal, in the cavity. 4. Immediately after the formation of the placenta, the fœtus is suspended at its lower end by a very short umbilical cord to the upper part of the uterus, and the large heavy head hangs downwards. 5. This position may, in favorable circumstances, be maintained during the whole of pregnancy; but much more frequently it undergoes changes into other positions, from which,

as a rule, a return is finally made to the head-presentation. 6. The first of the causes influencing the position of the fœtus is the rapid growth of the umbilical cord, which becomes even longer than the uterus, and thus is no longer capable of retaining the lower part of the body of the fœtus in the upper part of the uterus. 7. The fœtus may nevertheless constantly retain a vertical position with the head directed downwards, since the centre of gravity falls within the large head, and the relatively large quantity of amniotic fluid keeps the fœtus floating until the middle of pregnancy, so that the heaviest part gravitates towards the lowest part of the circumference of the uterus. 8. About the middle of pregnancy, in consequence of the rapid development of the body of the fœtus, the centre of gravity falls from the head to the upper part of the thorax, and changes the gravitative relations of the fœtus. 9. If at the same time, as usually is the case, the uterus grows more in its longitudinal than in its transverse diameter, its walls retain the fœtus in the vertical position; since it has become too long for its long diameter to find room in the transverse diameter of the uterus. 10. But if the uterine cavity become more roomy, the head may be inclined to either side, so that an oblique or even a transverse position may be assumed. 11. As the fœtus increases in further growth, the quantity of amniotic fluid diminishes in proportion to the size of the fœtus, and, if the lateral walls of the uterus be not unusually yielding, the fœtus is compelled to resume a vertical position. 12. If the head have hitherto remained the deepest part, it will be the point which in the perpendicular portion of the uterus comes most readily over the os uteri. 13. When the fœtus lies transversely, the manner in which the child presents depends partly on the resistance of the uterine walls, partly on the active movements of the fœtus induced by this resistance, but especially on the concurrence of contraction in the uterus. 14. In the transverse position, the head generally lies lower than the breech: this, and the circumstance that the centre of gravity of the fœtus lies nearer to the head than to the pelvic extremity, render it plain how, when the pressure exercised by the sides of the uterus on the head and breech of the fœtus becomes troublesome, the head is directed downwards more readily than upwards when the fœtus assumes the perpendicular position. 15. The action of the uterine contractions on the transversely lying fœtus varies, according as the contractions originate in single parts of the uterus or over the whole organ. 16. Partial contractions, as a rule, set in most strongly at the points of the uterine wall which are in immediate contact with the head and breech of the fœtus; they act directly on the fœtus, and, if it be only moderately movable, very readily bring it into the vertical position; and the head, generally lying lower, enters the strait of the pelvis more readily than the breech, the expulsion of which requires a more complicated mechanism than that of the head. 17. The contractions extending over the whole uterus act most directly on the pelvic end of the fœtus, which is usually directed upwards, even in the oblique and transverse positions. If the lower section of the uterus contract powerfully, this circumstance may, in spite of the downward pressure exerted on the breech by the fundus uteri, succeed in bringing the head nearer to the middle line of the uterus and thus establishing a cranial presentation; and this action is essentially supported and

favored by the greater firmness and power of resistance on the part of the foetal body. 18. If the contraction of the lower section of the uterus be less energetic, and the fetus be at the same time young, soft, and compressible, the breech, under the simultaneous angular bending of the foetus, is pressed still more deeply into the abdominal region, the head is pressed still further from the axis of the uterus, and the transverse presentation is thus finally converted into one of the breech or foot. 19. Hence the breech and foot presentations met with in such disproportionate frequency in abortion and premature labor are not primary positions, but are, as a rule, secondary, brought about by the contractions of the fundus uteri. 20. From the observations already made, it appears that the most various influences occurring during pregnancy may give rise to manifold changes of the position of the foetus, but that nature generally succeeds in bringing the head over the os uteri, where it is usually found lying during the last six or eight weeks of pregnancy. 21. Nevertheless, changes of position are not especially rare even at this late period of pregnancy; and their occurrence is favored if the quantity of amniotic fluid be great, if the embryonic cavity be roomy, if the uterine walls be yielding, and the active movements of the foetus be energetic. The partial contractions of the uterus, which set in more frequently and with greater intensity in the last weeks of pregnancy, also exercise a powerful influence on the position of the foetus. 22. In entirely normal relations, the deviation of the head after having once entered the pelvis during the last weeks of pregnancy, is hindered when the quantity of amniotic fluid be remarkably diminished in proportion to the size of the foetus, so that the size of the amniotic cavity and the mobility of the foetus is diminished; and also when there is an arrest of the development of the uterine walls, so that the organ is extended by the growing foetus. But this stretching of the walls of the uterus diminishes its yielding power, and, by causing it to envelop the body of the foetus more closely, renders difficult the occurrence of any important change of position.—*Brit. Med. Journal*, March 17, 1866, from *Wiener Med. Wochenschrift*, Jan. 20, 1866, and *American Journal of Medical Sciences*.

Massachusetts Medical College.—The following gentlemen received their degrees from Harvard University on the 18th inst. :—

NAME AND RESIDENCE.	THESIS.
Amory, Robert, A.B., Brookline,	<i>Hydrocyanic Acid.</i>
Babin, Hosea John, A.B., U. S. Navy,	<i>Quinine.</i>
Carey, Robert Hillary, Halifax, N. S.,	<i>Trephining.</i>
Clark, John Laing, New Bedford,	<i>Physiological Action of Mercury.</i>
Collins, William Droien, A.B., Fall River,	<i>Physical Sympathies.</i>
Colter, Newton Ramsay, Fredericton, N. B.,	<i>Alcohol.</i>
Crocker, John Myrick, Provincetown,	<i>Asiatic Cholera.</i>
Day, Albert, Boston,	<i>Methomania.</i>
Evans, Branch Eldridge, Picton, N. S.,	<i>Alcoholismus.</i>
Flatley, Thomas William, Boston,	<i>Fever.</i>
Gleason, John Lancaster, Barnet, Vt.,	<i>Acute Rheumatism.</i>
Granger, Reed Bartlett, Boston,	<i>Irregularities of the Teeth.</i>
Green, John Orne, A.B., Lowell,	<i>Imperforate Rectum.</i>
Greenough, Francis Boott, A.B., Cambridge,	<i>Nutritive Enemata.</i>
Hammond, Henry Louis, A.B., Providence, R. I.,	<i>Hygiene.</i>
Kempe, Charles Parke, A.B., Boston,	<i>Etiology of Cholera.</i>
Knight, Frederick Irving, A.B., Newburyport,	<i>Sphygmography.</i>
Mackin, Charles, Jr., Boston,	<i>Differential Diagnosis.</i>
Nichols, Arthur Howard, Boston,	<i>Injuries of Hip-joint.</i>

Oakes, Milledge, Bridgewater, N. S.,
 Pettingill, Edward Henry, Saxton's River, Vt.,
 Pierce, Gardner Carpenter, A.B., Abington,
 Pratt, Calvin, Bridgewater,
 Porteous, James George,
 Robbins, Albert Orlando, Providence, R. I.,
 Thorndike, Charles Howard, Litchington, Me.,
 Warren, John Collins, A.B., Boston,
 Whipple, Jeremiah, A.B., Cumberland, R. I.,
 Wiggin, Oliver Chase, Providence, R. I.,
 Whidden, Philon Currier, Boston,

Variola.
Typhoid Fever.
Diphtheria.
Surgical Diagnosis.

Asiatic Cholera.
Empiricism.
Spina Bifida.
Constipation.
Meddlesome Practice.
Physiology of Repair.

Medical Intelligence.—The International Ophthalmological Congress, which was to have been held at Vienna in August, has been indefinitely postponed on account of the war.

Germany, with a population of 46,000,000, contains 141 insane asylums. The number of their inmates is 19,550.

At a recent meeting of the Vienna Academy of Medicine, Prof. Hebra remarked that the pain of cauterization by nitrate of silver in lupus was materially diminished by Richardson's method of local anæsthesia, but that of the galvano-caustic was exaggerated by it. With regard to the scale of sensibility of different portions of the skin, he stated that the angle of the lower jaw and the regio-supra-hyoidea were the most sensitive to such cauterization. Prof. Patruban referred to the remarkable discovery, hitherto unexplained, that the nervus auriculo-temporalis of the third branch of the fifth pair retained its sensibility longer than any other in the deepest chloroform-narcosis.

According to the *Journal de Chimie Médicale*, the proportions of nicotine contained in the tobacco of various countries is as follows: Lot 7-96, Alsace 3-31, Virginia 6-87, Kentucky 6-09, Maryland 2-29, Havana 2-00 per cent. If a bit of cotton impregnated with tannic acid be placed in the tube of the pipe or porte-cigare, the passage of this poisonous principle will be prevented.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, JULY 14th, 1866.

DEATHS.

	Males.	Females.	Total
Deaths during the week	51	39	90
Ave. mortality of corresponding weeks for ten years, 1855-1865	40.8	35.9	76.7
Average corrected to increased population	00	00	83.65
Death of persons above 90	0	0	0

COMMUNICATIONS RECEIVED.—Treatment of Intermittent Fever, by Dr. B. Carpenter, of Pawtucket, R. I.

MARRIED.—In this city, 17th inst., Dr. Fitch Edward Oliver to Miss Susan Lawrence, eldest daughter of the late Rev. Charles Mason, D.D.

DEATHS IN BOSTON for the week ending Saturday noon, July 14th, 90. Males, 51—Females, 39. Abscess, 1—accident, 2—apoplexy, 1—congestion of the brain, 1—disease of the brain, 3—burns, 1—bronchitis, 2—cholera infantum, 6—consumption, 14—convulsions, 5—debility, 1—diarrhoea, 2—dropsy, 1—dropsy of the brain, 5—drowned, 1—dysentery, 2—scarlet fever, 1—typhoid fever, 1—disease of the heart, 2—infantile disease, 1—intemperance, 1—disease of the kidneys, 2—inflammation of the lungs, 4—marasmus, 2—measles, 1—old age, 1—paralysis, 2—premature birth, 1—puerperal disease, 1—purpura, 2—rheumatism, 2—disease of the spine, 1—suicide, 1—sunstroke, 9—syphilis, 1—unknown, 6.

Under 5 years of age, 39—between 5 and 20 years, 6—between 20 and 40 years, 23—between 40 and 60 years, 13—above 60 years, 9. Born in the United States, 55—Ireland, 25—other places, 10.